PALENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

MARGOLIS, Andrew Legal Department Symbian Software Limited 2-6 Boundary Row London SE1 8HP GRANDE BRETAGNE

PC

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing (day/month/year)

26.04.2006

Applicant's or agent's file reference

IMPORTANT NOTIFICATION

International application No.
PCT/GB2005/001300

International filing date (day/month/year)
Priority date (day/month/year)
Priority date (day/month/year)
01.04.2005

Priority date (day/month/year)
02.04.2004

Applicant SYMBIAN SOFTWARE LIMITED

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCTIABO1).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerns.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



European Patent Office - P.B. 5818 Patentiaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tb: 31 651 epo nl Fax: +31 70 340 - 3016 Authorized Officer

Bota-Madsen, Z



PAIENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTIO	N s	See Form PCT/IPEA/416
International application No. PCT/GB2005/001300	International filing date (day/m 01.04.2005	onth/year)	Priority date (day/month/year) 02.04.2004
International Patent Classification (IPC) or nat INV. G06F9/46	ional classification and IPC		
Applicant SYMBIAN SOFTWARE LIMITED			
This report is the international prelic Authority under Article 35 and trans	minary examination report, e mitted to the applicant acco	established by this rding to Article 36.	International Preliminary Examining
This REPORT consists of a total of	5 sheets, including this cov	er sheet.	
This report is also accompanied by	ANNEXES, comprising:		
 a. Sent to the applicant and to 			
sheets of the description and/or sheets containing Administrative Instruction	rectifications authorized by	nich have been am this Authority (see	ended and are the basis of this report e Rule 70.16 and Section 607 of the
 sheets which supersede beyond the disclosure in Supplemental Box. 	earlier sheets, but which the the international application	is Authority consid n as filed, as indica	ers contain an amendment that goes ted in item 4 of Box No. I and the
 b. ☐ (sent to the International Busequence listing and/or table Relating to Sequence Listing 	s related thereto, in electror	nic form only, as inc	of electronic carrier(s)) , containing a dicated in the Supplemental Box stions).
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 This report contains indications rela 	ting to the following items:		
Box No. I Basis of the repor	t		
☐ Box No. II Priority			
☐ Box No. III Non-establishmen	t of opinion with regard to n	ovelty, inventive st	ep and industrial applicability
☐ Box No. IV Lack of unity of in			
applicability; citati	ent under Article 35(2) with ons and explanations suppo	regard to novelty, in rting such stateme	nventive step or industrial nt
Box No. VI Certain document	s cited		
	the international application		
☐ Box No. VIII Certain observation	ns on the international appl	cation	
Date of submission of the demand	Date	of completion of this r	eport
01.02.2006	26.0	1.2006	
Name and mailing address of the international preliminary examining authority: European Patent Office - P.B. 58		rized officer	Agreem Names .
NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 65 Fax: +31 70 340 - 3016	de M	an, A	
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2005/001300

_	Во	x No. I Basis of the repor	t	
1.	With regard to the language, this report is based on			
	☐ the international application in the language in which it was filed			
		a translation of the internat of a translation furnished for	ional application into , which is the language or the purposes of:	
		publication of the interna	der Rules 12.3(a) and 23.1(b)) ational application (under Rule 12.4(a)) examination (under Rules 55.2(a) and/or 55.3(a))	
2.	hav	With regard to the elements' of the international application, this report is based on (replacement sheets whit have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filled" and are not annexed to this report):		
	Description, Pages			
	1-5,	, 8-16	as originally filed	
	6, 7	r, 7a	received on 02.02.2006 with letter of 31.01,2006	
	Claims, Numbers			
	1-31	1	received on 02.02.2006 with letter of 31.01.2006	
	Dra	Drawings, Sheets		
	1/1		as originally filed	
		a sequence listing and/or ar	ny related table(s) - see Supplemental Box Relating to Sequence Listing	
3.		The amendments have resu	ulted in the cancellation of:	
		the description, pages the claims, Nos.		
		☐ the drawings, sheets/figs		
		☐ the sequence listing (spe ☐ any table(s) related to se		
4		This report has been estable	ished as if (some of) the amendments annexed to this report and listed below	
4.	had	I not been made, since they I oplemental Box (Rule 70.2(c)	have been considered to go beyond the disclosure as filed, as indicated in the	
		☐ the description, pages ☐ the claims, Nos.		
		☐ the drawings, sheets/figs		
		☐ the sequence listing (spe ☐ any table(s) related to se		
	*	If item 4 applies, so	ome or all of these sheets may be marked "superseded,"	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2005/001300

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1-31

1. Statement

Novelty (N)

Yes: Claims

No: Claims

Inventive step (IS)

Yes: Claims

No: Claims 1-31

Industrial applicability (IA)

Yes: Claims 1-31

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1 Reference is made to the following document:
 - D1: Cherepov, "Hard Real-Time With RTX on Windows NT" (July 1999)
- 2 Document D1 discloses, using the wording of claim 1 insofar as possible,

a computing device comprising a scheduler incorporating an algorithm for ordering the running of threads of execution having different priorities (page 107, right-hand column, lines 8-19; RTSS scheduler); and

wherein a ready list is kept of threads which are scheduled to run on the device, ordered by priority (page 107, right-hand column, lines 20-30; ready queue per priority);

the device further comprising at least one locking mechanism for blocking access to a resource of the device from all threads except for a thread that holds the locking mechanism (page 107, right-hand column, lines 43-49; access to an object is blocked for a high priority thread while a low priority thread holds the object);

and wherein, when a scheduled thread is blocked from running because the resource it requires is locked, the thread which holds the lock is caused to run (page 107, right-hand column, lines 43-49; the effective priority of the low priority thread that holds the object is promoted to that of the high priority thread, thereby implicitly causing it to run),

from which the subject-matter of claim 1 differs in that the blocked thread is not removed from its place on the ready list.

This difference merely relates to an implementation detail of the priority inheritance scheme. The fact that the blocked thread is not removed from the ready list does not

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/GB2005/001300

by itself imply any technical advantage over what is disclosed in document D1. Not removing a blocked thread from the ready list, but, for example, flagging it as blocked, is therefore regarded as an obvious design possibility for the skilled person.

Thus the subject-matter of claim 1 does not involve an inventive step (Article 33(3) PCT).

- 3 The subject-matter of independent claims 17 and 18 largely corresponds to the subject-matter of claim 1, which is found to lack inventive step. Thus, for substantially the same reasons as above, the subject-matter of claims 17 and 18 is not new either (Article 33(3) PCT).
- 4 The additional features of dependent claims 2, 4, 19 and 21 are also disclosed by document D1, see page 107, right-hand column, lines 8-30.
 - Thus the subject-matter of claims 2, 4, 19 and 21 does not involve an inventive step (Article 33(3) PCT).
- 5 Dependent claims 3, 5-16, 20 and 22-31 specify obvious and well-known features that merely define implementation details of the scheduler and locking mechanism, not affecting the actual scheduling scheme or achieving any non-obvious technical advantages. These features are therefore not considered to contribute to an inventive step.

Thus the subject-matter of claims 3, 5-16, 20 and 22-31 does not involve an inventive step (Article 33(3) PCT).